mentioned, neurasthenia often plays a conspicuous part. If these observations are well founded, it is of the highest importance that you understand clearly as possible the nature of this disorder and its appropriate management.

In the present course of instruction, however, all I can do is to give you a brief account of its phenomena and underlying conditions, its relations, and treatment, and leave you to apply the doctrines I have placed before you, in your own observations when you meet with the disease. In my next lecture, I will give some account of the hygienic and medicinal treatment of neurasthenia.

ART. II.—MICROSCOPIC STUDIES ON THE CENTRAL NERVOUS SYSTEM OF REPTILES AND BATRACHIANS.

By John J. Mason, M. D.

ARTICLE I.—THE SPINAL CORD OF THE FROG—RANA PIPIENS, RANA HALECINA.

IT is not intended in these articles to give, in detail, an anatomical description of the nervous system of this class of animals. So far as the anourous group of batrachians is concerned, one could hardly effect such a purpose better than by translating the works of either Reissner * or Stieda,† which together with those of Wyman‡ and Ecker§ are in the hands of most comparative anatomists. Only in writing of species, the nervous system of which may not previously have been

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* *Der Bau des Centralen Nervensystems der Ungeschwänzten Batrachier.* Dorpat, 1864.

† *Studien ueber das Central Nervensystem der Wirbelthiere.* Leipzig, 1870.

‡ *Anatomy of the Nervous System of Rana pipiens.* Washington, 1853.

§ *Icones Physiologicæ,* 1851–59. Liepzig. "Die Anatomie des Frosches des physiologischen Thieres, ist fur den Physiologen, kaum minder wichtig, als die Anatomie des Menschen."

2. The nuclei of the large nerve-cells are more generally oval in form than are those of the smaller cells. I have confirmed this in a few fresh preparations only. It is possible that the re-agents employed have a different effect upon the two classes of nuclei, but it seems more reasonable to conclude that they have a different form anatomically.

3. The nerve-cells of the crural enlargement are as abundant as those of the brachial enlargement, if not more so. Their nuclei are larger, as are also the surrounding masses of protoplasm or cell bodies.

4. No difference in structure can be made out in the upper portion of the cord, corresponding with the sexual function in the male. The long-continued and violent tonic spasm of the anterior extremities, must be explained by local hyperæmia influencing the same structures as those which exist in the female.

5. The relation which is generally believed to exist between the so-called motor-cells and the inferior (anterior) roots, can be demonstrated in the frog more readily than in any other animal.